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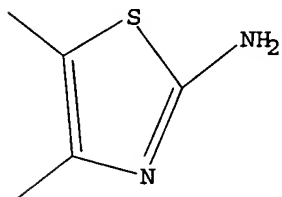
Uploading C:\Program Files\Stnexp\Queries\thiazole.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 fam sam

SAMPLE SEARCH INITIATED 09:28:50 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 188 TO ITERATE

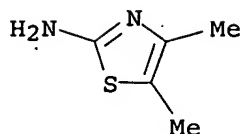
100.0% PROCESSED 188 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
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FULL ESTIMATED COST

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FILE COVERS 1907 - 4 Apr 2007 VOL 146 ISS 15

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=> s l3

L4 184 L3

=> d ti au abs so py 1-10

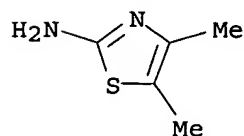
L4 ANSWER 1 OF 184 CAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of pyrimidyl-thiophene derivatives as Aurora kinase inhibitors

IN Adams, Jerry Leroy; Drewry, David Harold; Linn, James Andrew

GI

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN
RN 2289-75-0 REGISTRY
ED Entered STN: 16 Nov 1984
CN 2-Thiazolamine, 4,5-dimethyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Thiazole, 2-amino-4,5-dimethyl- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 2-Amino-4,5-dimethylthiazole
CN 4,5-Dimethyl-2-thiazolamine
MF C5 H8 N2 S
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS,
CHEMINFORMRX, CIN, CSChem, IFICDB, IFIPAT, IFIUDb, TOXCENTER, USPAT2,
USPATFULL
(*File contains numerically searchable property data)



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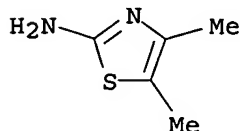
140 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
140 REFERENCES IN FILE CAPLUS (1907 TO DATE)
10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

PROJECTED ITERATIONS: 2938 TO 4582
PROJECTED ANSWERS: 1 TO 80

L2 1 SEA FAM SAM L1

=> d scan

L2 1 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2-Thiazolamine, 4,5-dimethyl- (9CI)
MF C5 H8 N2 S
CI COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

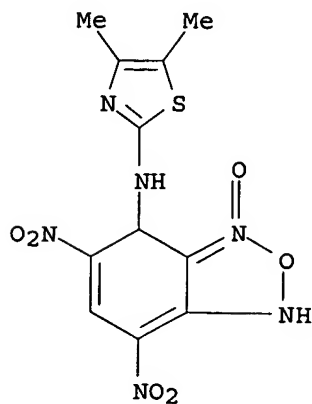
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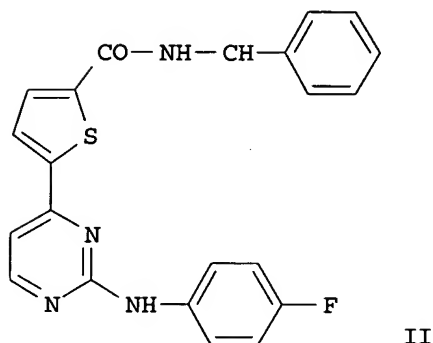
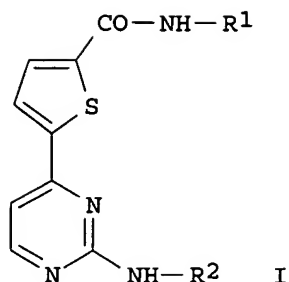
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SEARCH TIME: 00.00.01

L3 10 SEA FAM FUL L1

=> d scan

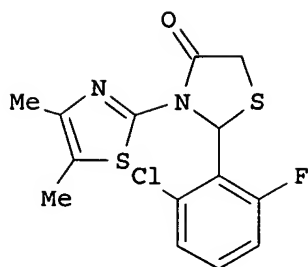
L3 10 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2,1,3-Benzoxadiazol-4-amine, N-(4,5-dimethyl-2-thiazolyl)-1,4-dihydro-5,7-dinitro-, 3-oxide, compd. with 4,5-dimethyl-2-thiazolamine (1:1) (9CI)
MF C11 H10 N6 O6 S . C5 H8 N2 S
CM 1





- AB Title compds. I [R1 = HO(CH2)4-, NCCH2-, (un)substituted Ph, phenylalkyl, etc.; R2 = 2-(N,N-dimethylaminoethyl)-1,3-dioxo-2H-isoindol-5-yl, 2-(N,N-dimethylaminomethyl)-benzoxazol-6-yl, or substituted phenyl], and their pharmaceutically acceptable salts, are prepared and disclosed as Aurora kinase inhibitors. Thus, e.g., II was prepared by cyclocondensation of 5-[(2E)-3-(dimethylamino)-2-propenoyl]-N-(phenylmethyl)-2-thiophenecaboxamide (preparation given) with 1-(4-fluorophenyl)guanidine carbonate. I were tested for their Aurora kinase inhibitory activity and demonstrated pIC50 values ≥ 5.0 . I as inhibitors of Aurora kinase activity should prove useful for the treatment and prevention of diseases associated with cell proliferation such as cancer.
- SO PCT Int. Appl., 205pp.
CODEN: PIXXD2
- PY 2007
- L4 ANSWER 2 OF 184 CAPLUS COPYRIGHT 2007 ACS on STN
- TI 2-Amino-5-aminomethylphenol derivatives for dyeing hair fibers
- IN Pasquier, Cecile; Tinguely, Eric; Buclin, Veronique; Braun, Hans-Juergen
- AB The object of the present patent application are new 2-amino-5-aminomethylphenol derivs. and colorants for oxidative dyeing of keratin fibers, particularly human hair, containing at least 1 2-amino-5-aminomethylphenol derivative or a water-soluble salt thereof. A
- 2-amino-5-aminomethylphenol derivative was prepared and used 0.00125 mol along with a developer in a hair dye formulation.
- SO Eur. Pat. Appl., 28pp.
CODEN: EPXXDW
- PY 2007
2007
2007
- L4 ANSWER 3 OF 184 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Design, synthesis, and evaluation of 2-aryl-3-heteroaryl-1,3-thiazolidin-4-ones as anti-HIV agents
- AU Rawal, Ravindra K.; Tripathi, Rajkamal; Katti, S. B.; Pannecouque, Christophe; De Clercq, Erik

GI



I

AB Compds. having isothiurea or thiurea functional group have shown high anti-HIV-1 activity. Therefore, a series of 2-aryl-3-heteroaryl-1,3-thiazolidin-4-ones were designed, synthesized, and evaluated for anti-HIV-1 RT activity. The results of in vitro tests showed that the compound 9 (I) exhibited EC₅₀ at 0.26 μ M with minimal toxicity in MT-4 cells as compared to 0.35 μ M for thiazobenzimidazole (TBZ). It may be inferred from the present data that the majority of compds. in this series exhibit higher selectivity index than TBZ.

SO Bioorganic & Medicinal Chemistry (2007), 15(4), 1725-1731
CODEN: BMECEP; ISSN: 0968-0896

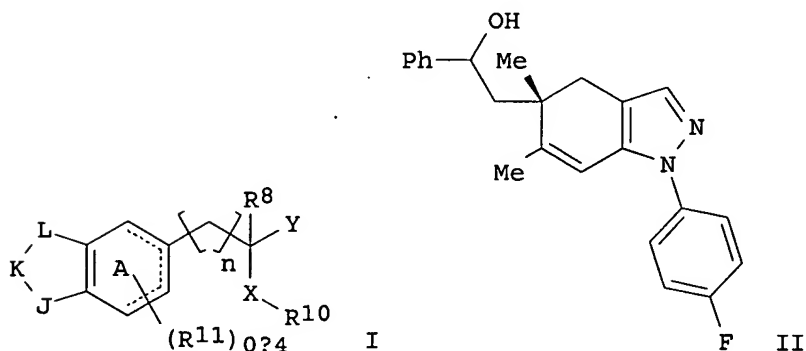
PY 2007

L4 ANSWER 4 OF 184 CAPLUS COPYRIGHT 2007 ACS on STN

TI Indazole compounds as modulators of glucocorticoid receptor, AP-1, and/or NF- κ B activity and their preparation, pharmaceutical compositions and use in the treatment of obesity, diabetes, inflammatory and immune diseases

IN Duan, Jingwu; Lu, Zhonghui; Weinstein, David S.; Jiang, Bin

GI



AB Non-steroidal compds. are provided which are useful in treating diseases associated with modulation of the glucocorticoid receptor, AP-1, and/or NF- κ B activity including obesity, diabetes, inflammatory and immune diseases, and have the structure of formula I or an enantiomer, a diastereomer, a pharmaceutically acceptable salt, or hydrate thereof.

Also provided are pharmaceutical compns. and methods of treating obesity, diabetes and inflammatory or immune associated diseases comprising said compds. Compds. of formula I wherein dotted line is a single and double bond; A is a partially saturated ring; n is 0, 1, and 2; J is (un)substituted alkyl-N, (un)substituted alkenyl-N, (un)substituted methylene, (un)substituted alkynyl-N, etc.; K and L are independently NH and derivs., and (un)substituted methylene; Y is a bond, alkylene, alkenylene, alkynylene, CO< NH and derivs., etc.; Y is H, halo, NO₂, CN, OH and derivs., NH₂ and derivs., etc.; R₈ and R₁₀ are independently H, (un)substituted alkyl, (un)substituted alkenyl, (un)substituted alkynyl, (hetero)aryl, etc.; R₁₁ is (un)substituted alkyl, (un)substituted alkenyl, (un)substituted alkynyl, halo, NO₂, azide, CN, OH and derivs., etc.; and their pharmaceutically acceptable salts thereof, are claimed. Example compound II was prepared by condensation of Et 2-methylacetoacetate with (S)-(-)- α -methylbenzylamine; the resulting enamine underwent cyclization with Me vinyl ketone to give Et 1,2-dimethyl-4-oxo-2-cyclohexenecarboxylate, which underwent formylation with Et formate to give the corresponding 6-formyl-2-cyclohexenone, which underwent cyclocondensation with 4-fluorophenylhydrazine to give 5,6-dimethyl-1-(4-fluorophenyl)-4,5-dihydroindazole-5-carboxylic acid Et ester, which underwent reduction to give the corresponding indazole-5-carboxaldehyde, which underwent olefination with (methoxymethyl)triphenylphosphonium chloride to give the corresponding enol ether, which underwent hydrolysis and resolution to give the corresponding (R)-5-indazol-5-ylacetaldehyde, which underwent addition of phenylmagnesium bromide to give followed by resolution to give both the isomers of I. All the invention compds. were evaluated for their glucocorticoid receptor, AP-1 and NF- κ B modulatory activity. These compds. may be useful in the treatment of obesity, diabetes, inflammatory and immune disease.

SO PCT Int. Appl., 171pp.

CODEN: PIXXD2

PY 2006

L4 ANSWER 5 OF 184 CAPLUS COPYRIGHT 2007 ACS on STN

TI Synthesis and Antitumor Activity of Guanylhyazones from 6-(2,4-Dichloro-5-nitrophenyl)imidazo[2,1-b]thiazoles and 6-Pyridylimidazo[2,1-b]thiazoles

AU Andreani, Aldo; Burnelli, Silvia; Granaiola, Massimiliano; Leoni, Alberto; Locatelli, Alessandra; Morigi, Rita; Rambaldi, Mirella; Varoli, Lucilla; Farruggia, Giovanna; Stefanelli, Claudio; Masotti, Lanfranco; Kunkel, Mark W.

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Imidazothiazole guanylhyazones, e.g., I, were prepared by substitution of bromoketones, e.g., II, with 2-aminothiazoles, e.g., III, followed by Vilsmeier formylation and condensation with aminoguanidine. The antitumor activities of the synthesized guanylhyazones were tested.

SO Journal of Medicinal Chemistry (2006), 49(26), 7897-7901

CODEN: JMCMAR; ISSN: 0022-2623

PY 2006

L4 ANSWER 6 OF 184 CAPLUS COPYRIGHT 2007 ACS on STN

TI Assessing the Nitrogen and Carbon Nucleophilicities of 2-Aminothiazoles through Coupling with Superelectrophilic 4,6-Dinitrobenzofuroxan

AU Forlani, Luciano; Tocke, Aline Laure; Del Vecchio, Erminia; Lakhdar, Sami; Goumont, Regis; Terrier, Francois

AB The reactions of 2-aminothiazole (1a), 4-methyl-2-aminothiazole (1b), and 4,5-dimethyl-2-aminothiazole (1c) with superelectrophilic

4,6-dinitrobenzofuroxan (DNBF) have been studied in acetonitrile and a 70/30 (volume/volume) H₂O/Me₂SO mixture. While exhibiting a somewhat higher nitrogen basicity than that of anilines, 1a and 1b do not react as nitrogen nucleophiles, affording exclusively anionic C-bonded σ -adducts (C-1a and C-1b) through electrophilic SEAr substitution of the thiazole ring by DNBF. Only in the case of the 4,5-di-Me derivative 1c a N-adduct, N-1c, was obtained. On the basis of ¹H-¹⁵N correlations, it is demonstrated that this adduct, N-1c; 1c, H⁺, is derived from DNBF addition at the exocyclic amino group and not at the endocyclic nitrogen center of 1c. Rate consts. have been determined in the two solvents for the formation of the adducts, revealing a reactivity sequence which accounts well for the finding that 1a and 1b behave preferentially as carbon rather than nitrogen nucleophiles. The enaminic character of these thiazoles is assessed through an estimation of the pK_a values for their C-protonation in

aqueous

solution as well as through a positioning of their reactivity on the nucleophilicity scale recently developed by Mayr et al. (Acc. Chemical Res. 2003, 36, 66). With N values of the order of 6.80 and 5.56, 1b and 1a have a carbon nucleophilicity comparable to that of N-methylindole and indole, resp.

SO Journal of Organic Chemistry (2006), 71(15), 5527-5537

CODEN: JOCEAH; ISSN: 0022-3263

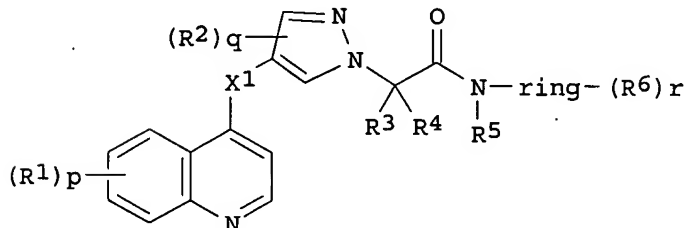
PY 2006

L4 ANSWER 7 OF 184 CAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of quinoline derivatives for use in treatment of cell proliferative disorders or disease associated with angiogenesis and/or vascular permeability

IN Jung, Frederic Henri

GI



I

AB Quinoline derivs. I, wherein X1 is O, substituted nitrogen; p is 0-3; R1 is halogen, CF₃, Cn, OH, SH, NH₂, alkyl, alkenyl, alkynyl, alkoxy, alkenyl-oxy, alkynyl-oxy, alkylthio, alkyl-sulfinyl, alkyl-sulfonyl, alkylamino, Q1X2; X2 is O, S, SO, SO₂, substituted amine, CO, amide, amino-carbonyl; Q1 is aryl, arylalkyl, cycloalkyl, cyclo-alkenyl, cyclo-alkenyl-alkyl, heteroaryl, heterocycle, heterocyclyl-alkyl; q = 0-2; R2 is halogen CF₃, CN, OH, amino, alkyl, alkenyl, alkynyl, alkoxy, alkylamino; R3 is H, alkyl, alkenyl, alkynyl; R3 and R4 together with the carbon atom to which they are attached form a cycloalkyl group; R5 is H, alkyl, alkenyl, alkynyl; ring is 6-membered mono-cyclic, 10-membered bicyclic aryl ring, heterocycle; X1 is O, S, SO, SO₂, substituted nitrogen, Co, amide, amino-carbonyl, sulfonyl-amine, amino-sulfonyl, ; R6 is halogen, CF₃, CN, OH, SH, amino, carboxy, carbamoyl, sulfamoyl, ureido, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkyl-sulfinyl, alkyl-sulfonyl, alkylamino, alkoxy-carbonyl, alkanoyl, alkanoyl-oxy, alkyl-carbamoyl; r is 0-3, were prepared for use in the treatment of cell proliferative disorders or in the treatment of disease states associated with angiogenesis and/or vascular permeability. Thus, N-(3-fluorophenyl)-2-[4-(6-cyano-7-methoxy-quinolin-4-yl-oxy)pyrazol-1-yl]acetamide was prepared for use in treatment of cell proliferative disorders or disease associated with angiogenesis and/or vascular permeability. The compds. of the present

invention were tested as inhibitors of PDGFR α , PDGFR β and KDR tyrosine kinase enzymes, as inhibitors in vitro of the phosphorylation of PDGFR expressed on MG63 osteosarcoma cells, as inhibitors in vitro of the proliferation of MG63 osteosarcoma cells, as inhibitors in vitro of the proliferation of human umbilical vein endothelial cells (HUVECs), and as inhibitors in vivo of the growth in nude mice of xenografts of human tumor tissue such as CaLu-6 and Colo205.

SO PCT Int. Appl., 109 pp.

CODEN: PIXXD2

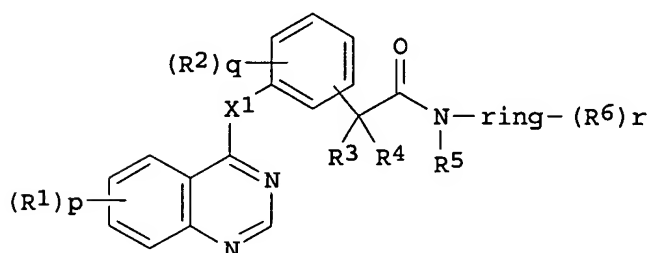
PY 2006

L4 ANSWER 8 OF 184 CAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of quinazoline derivatives for use in treatment of cell proliferative disorders or disease associated with angiogenesis and/or vascular permeability

IN Ple, Patrick; Jung, Frederic Henri

GI



I

AB Quinazoline derivs. I, wherein X1 is O, substituted amine; p is 0-3; R1 is halogen, CF₃, Cn, OH, SH, NH₂, alkyl, alkenyl, alkynyl, alkoxy, alkenyl-oxy, alkynyl-oxy, alkylthio, alkyl-sulfinyl, alkyl-sulfonyl, alkylamino, Q1X2; X2 is O, S, SO, SO₂, substituted amine, CO, amide, amino-carbonyl; Q1 is aryl, arylalkyl, cycloalkyl, cyclo-alkenyl, cyclo-alkenyl-alkyl, heteroaryl, heterocycle, heterocyclyl-alkyl; q = 0-2; R2 is halogen CF₃, CN, OH, amino, alkyl, alkenyl, alkynyl, alkoxy, alkylamino; R3 is H, alkyl, alkenyl, alkynyl; R3 and R4 together with the carbon atom to which they are attached form a cycloalkyl group; R5 is H, alkyl, alkenyl, alkynyl; ring is 6-membered mono-cyclic, 10-membered bicyclic aryl ring, heterocycle; r is 0-3; R6 is halogen, CF₃, CN, OH, SH, amino, carboxy, carbamoyl, sulfamoyl, ureido, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkyl-sulfinyl, alkyl-sulfonyl, alkylamino, alkoxy-carbonyl, alkanoyl, alkanoyl-oxy, alkyl-carbamoyl, were prepared for use in the treatment of cell proliferative disorders or in the treatment of disease states associated with angiogenesis and/or vascular permeability. Thus, (2S)-2-amino-2-[4-(6,7-dimethoxy-quinazolin-4-yl-oxy)phenyl]-N-(4,5-dimethyl-thiazol-2-yl)acetamide was prepared and tested in treatment of cell proliferative disorders or disease associated with angiogenesis and/or vascular permeability. The compds. of the present invention were tested as inhibitors of PDGFR α , PDGFR β and KDR tyrosine kinase enzymes, as inhibitors in vitro of the phosphorylation of PDGFR expressed on MG63 osteosarcoma cells, as inhibitors in vitro of the proliferation of MG63 osteosarcoma cells, as inhibitors in vitro of the proliferation of human umbilical vein endothelial cells (HUVECs), and as inhibitors in vivo of the growth in nude mice of xenografts of human tumor tissue such as CaLu-6 and Colo205.

SO PCT Int. Appl., 191 pp.

CODEN: PIXXD2

PY 2006

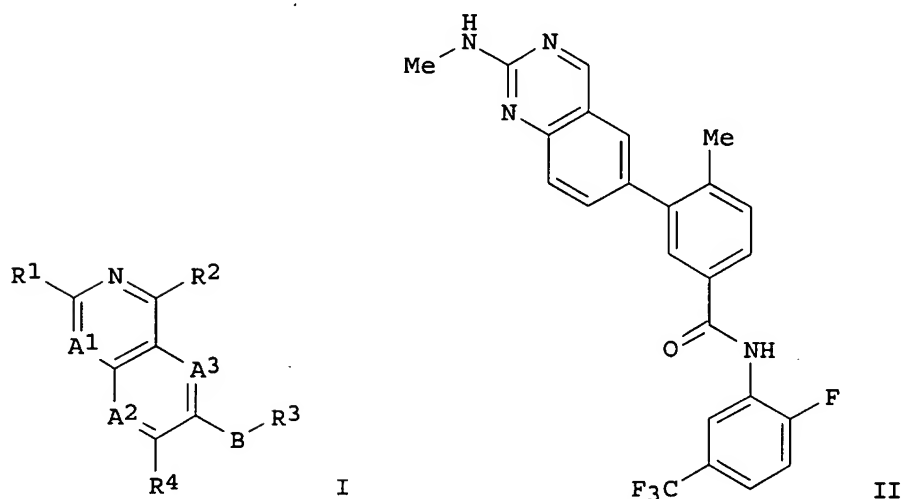
L4 ANSWER 9 OF 184 CAPLUS COPYRIGHT 2007 ACS on STN

TI Aryl nitrogen-containing bicyclic compounds and their preparation,

pharmaceutical compositions, and protein kinase inhibitory activity and use in prophylaxis and treatment of kinase-mediated diseases

IN Patel, Vinod F.; Kim, Joseph L.; Geuns-Meyer, Stephanie D.; Chaffee, Stuart C.; Cee, Victor J.; Hodous, Brian L.; Bellon, Steven; Harmange, Jean-Christophe; Olivieri, Philip R.; Thaman, Maya C.; Dimauro, Erin F.; Buchanan, John L.; McGowan, David C.; Albrecht, Brian K.; Deak, Holly L.; Bemis, Jean E.; White, Ryan; Martin, Matthew W.; Habgood, Gregory J.; Tempest, Paul A.; Masse, Craig E.; Buckner, William H.; Herberich, Bradley J.; Graceffa, Russell; Zhang, Dawei; Xu, Shimin; Sham, Kelvin; Rzasa, Robert M.; Falsey, James Richard; Chakrabarti, Partha P.; Cao, Guo-Qiang; Tomlinson, Susan Ann; Pettus, Liping H.; Smith, Adrian Leonard; Paras, Nick A.; Liu, Gang; Demorin, Frenel F.; Tasker, Andrew; Reed, Anthony

GI



AB The invention comprises a class of compds. of formula I useful for the prophylaxis and treatment of protein kinase mediated diseases, including inflammation, cancer and related conditions. Compds. of formula I wherein A¹ and one of A² and A³ are independently CR⁵ or N; B is a bond, CR⁵R⁶, CO, NR⁶, O, S, SO, or SO₂; R¹ is halo, haloalkyl, NO₂, CN, H, NH₂ and derivs., OH and derivs., SH and derivs., CHO and derivs., OC(O)R and derivs., CO₂H and derivs., CONH₂ and derivs., CSNH₂ and derivs., NHCHO and derivs., NHC(S)H and derivs., NHCONH₂ and derivs., NHCSNH₂ and derivs., SO₂H and derivs., SO₂NH₂ and derivs., etc.; R², R⁴, and R⁵ are independently H, halo, haloalkyl, NO₂, CN, OH and derivs., SH and derivs., NH₂ and derivs., CHO and derivs., CO₂H and derivs., CONH₂ and derivs., NHCONH₂ and derivs., SO₂H and derivs., SO₂NH₂ and derivs., NHSO₂H and derivs., (un)substituted C₁-10 (hetero)alkyl, (un)substituted C₂-10 alkenyl, (un)substituted C₂-10 (hetero)alkynyl, (un)substituted 3- to 10-membered (hetero)cycloalkyl, (un)substituted 4- to 10-membered (hetero)cycloalkenyl, etc.; R³ is (un)substituted (un)saturated 5- to 8-membered (hetero)monocyclic, (un)substituted (un)saturated 6- to 12-membered (hetero)bicyclic, or (un)substituted (un)saturated 7- to 14-membered (hetero)tricyclic rings; R⁶ is H, (un)substituted C₁-10 (hetero)alkyl, (un)substituted C₂-10 (hetero)alkenyl, (un)substituted C₂-10 (hetero)alkynyl, (un)substituted 3- to 10-membered (hetero)cycloalkyl, (un)substituted 4- to 10-membered (hetero)cycloalkenyl; and their stereoisomers, tautomers, solvates, pharmaceutically acceptable salts, derivs., and prodrugs thereof are claimed. Accordingly, the invention also comprises pharmaceutical compns. comprising the compds. of the invention, methods for the prophylaxis and treatment of kinase mediated

diseases using the compds. and compns. of the invention, and intermediates and processes useful for the preparation of compds. of the invention. Example compound II was prepared by boration of 3-iodo-4-methylbenzoic acid with bis(pinacolato)diboron; the resulting 4-methyl-3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)benzoic acid was converted to the corresponding acid chloride, in situ, and reacted with 2-fluoro-5-trifluoromethylbenzeneamine to give N-(2-fluoro-5-fluoromethylphenyl)-4-methyl-3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)benzamide, which underwent cross-coupling with 6-bromo-N-methylquinazolin-2-amine to give compound II. About 2000 invention compds. of formula I were prepared by similar procedures. All the invention compds. were tested for their protein kinase inhibitory activity. Example compound I along with many other invention compound showed good inhibitory activity. From the HTRF assay, the IC50 values for inhibition of Tie-2 was determined to be less than or equal to 1 μ M for some of the invention compds. For the inhibition of Lck kinase enzyme, the some of the exemplary compds. exhibited an average IC50 value of 25 μ M or less and some invention compound exhibited an IC50 value of 1 μ M or less, in the human HTRF assay. The invention compds. were also found to be active inhibitors of the VEGF kinase receptor. Furthermore, some of the invention compds. exhibited activities in the monocyte assay with IC50 values of 25 μ M or less. Various compds. of the invention have selective inhibitory activity for specific kinase receptor enzymes, including Tie-2, Lck, p38 and VEGFR/KDR. Accordingly, the compds. of the invention would be useful in therapy as antineoplasia agents, antiinflammatory agents, or to minimize deleterious effects of Tie-2, Lck, VEGF and/or p38.

SO PCT Int. Appl., 876 pp.

CODEN: PIXXD2

PY 2006

2006

2007

L4 ANSWER 10 OF 184 CAPLUS COPYRIGHT 2007 ACS on STN

TI One pot synthesis using supported reagents system KSCN/SiO2-RNH3OAc/Al2O3: synthesis of 2-aminothiazoles and N-allylthioureas

AU Aoyama, Tadashi; Murata, Sumiko; Arai, Izumi; Araki, Natsumi; Takido, Toshio; Suzuki, Yoshitada; Kodomari, Mitsuo

AB A simple and efficient method has been developed for the synthesis of 2-aminothiazoles and N-allylthioureas from com. available materials in one pot by using a supported reagents system, KSCN/SiO2-RNH3OAc/Al2O3, in which α -halo ketones react first with KSCN/SiO2 and the product, α -thiocyanatoketone, reacts with RNH3OAc/Al2O3 to give the final products, 2-aminothiazoles, in good yield. Allyl bromides react with KSCN/SiO2 and the products, allyl isothiocyanates, react with RNH3OAc/Al2O3 to give N-allylthioureas.

SO Tetrahedron (2006), 62(14), 3201-3213

CODEN: TETRAB; ISSN: 0040-4020

PY 2006

=> file reg

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
30.65	99.91

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-7.80	-7.80

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<http://www.cas.org/ONLINE/UG/regprops.html>

=> E "2-AMINO-4,5-DIMETHYLTHIAZOLE"/CN 25

E1	1	2-AMINO-4,5-DIMETHYLPYRIMIDINE/CN
E2	1	2-AMINO-4,5-DIMETHYLSELENAZOLE, HYDROCHLORIDE/CN
E3	1 -->	2-AMINO-4,5-DIMETHYLTHIAZOLE/CN
E4	1	2-AMINO-4,5-DIMETHYLTHIAZOLE HYDROBROMIDE/CN
E5	1	2-AMINO-4,5-DIMETHYLTHIAZOLE HYDROCHLORIDE/CN
E6	1	2-AMINO-4,5-DIMETHYLTHIOPHENE-3-CARBOXAMIDE/CN
E7	1	2-AMINO-4,5-DIMETHYLTHIOPHENE-3-CARBOXYLIC ACID/CN
E8	1	2-AMINO-4,5-DINITROPHENOL/CN
E9	1	2-AMINO-4,5-DIPHENYL-1,3-THIAZOLE/CN
E10	1	2-AMINO-4,5-DIPHENYL-3-FURANCARBONITRILE/CN
E11	1	2-AMINO-4,5-DIPHENYLBENZOIC ACID/CN
E12	1	2-AMINO-4,5-DIPHENYLCYCLOPENT-2-ENE-1,1,3-TRICARBONITRILE/CN
E13	1	2-AMINO-4,5-DIPHENYLIMIDAZOLE/CN
E14	1	2-AMINO-4,5-DIPHENYLNICOTINONITRILE/CN
E15	1	2-AMINO-4,5-DIPHENYLOXAZOLE/CN
E16	1	2-AMINO-4,5-DIPHENYLPYRIMIDINE/CN
E17	1	2-AMINO-4,5-DIPHENYLTHIAZOLE/CN
E18	1	2-AMINO-4,5-DIPHENYLTHIAZOLE HYDROCHLORIDE/CN
E19	1	2-AMINO-4,5-IMIDAZOLEDICARBOXYLIC ACID/CN
E20	1	2-AMINO-4,5-METHYLENEDIOXY-A-(4'-METHOXYPHENYL) CINNAMIC ACID/CN
E21	1	2-AMINO-4,5-METHYLENEDIOXY-PHENYLBENZYL METHANONE/CN
E22	1	2-AMINO-4,5-METHYLENEDIOXYBENZAMIDE/CN
E23	1	2-AMINO-4,5-METHYLENEDIOXYBENZOIC ACID/CN
E24	1	2-AMINO-4,5-METHYLENEDIOXYBENZONITRILE/CN
E25	1	2-AMINO-4,5-PYRIMIDINEDIOL/CN

=> S E3

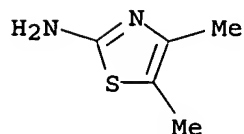
L5 1 "2-AMINO-4,5-DIMETHYLTHIAZOLE"/CN

=> DIS L5 1 IDE

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN
RN 2289-75-0 REGISTRY
ED Entered STN: 16 Nov 1984
CN 2-Thiazolamine, 4,5-dimethyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Thiazole, 2-amino-4,5-dimethyl- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 2-Amino-4,5-dimethylthiazole
CN 4,5-Dimethyl-2-thiazolamine
MF C5 H8 N2 S
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS,

CHEMINFORMRX, CIN, CSCHM, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPAT2,
USPATFULL

(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

140 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
140 REFERENCES IN FILE CAPLUS (1907 TO DATE)
10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s 2289-75-0 or 2-amino-4,5-dimethylthiazole

1 2289-75-0

(2289-75-0/RN)

21941271 2

6775643 AMINO

11456 AMINOS

6775643 AMINO

(AMINO OR AMINOS)

619191 4,5

138 DIMETHYLTHIAZOLE

3 2-AMINO-4,5-DIMETHYLTHIAZOLE

(2 (W) AMINO (W) 4,5 (W) DIMETHYLTHIAZOLE)

L6

3 2289-75-0 OR 2-AMINO-4,5-DIMETHYLTHIAZOLE

=> s 2289-75-0 or 2-amino-4,5-dimethylthiazole

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...

Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L8 140 L7

9105408 2

1112330 AMINO

44 AMINOS

1112348 AMINO

(AMINO OR AMINOS)

5555409 4

6355474 5

798 DIMETHYLTHIAZOLE

16 DIMETHYLTHIAZOLES

808 DIMETHYLTHIAZOLE

(DIMETHYLTHIAZOLE OR DIMETHYLTHIAZOLES)

97 2-AMINO-4,5-DIMETHYLTHIAZOLE

(2 (W) AMINO (W) 4 (W) 5 (W) DIMETHYLTHIAZOLE)

L9 172 L8 OR 2-AMINO-4,5-DIMETHYLTHIAZOLE

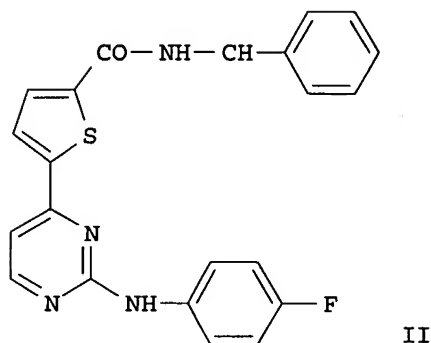
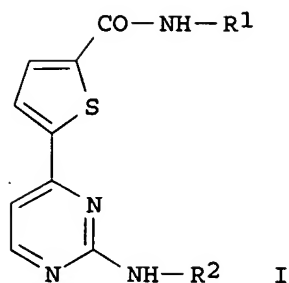
=> d ti au abs so py 1-10

L9 ANSWER 1 OF 172 CAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of pyrimidyl-thiophene derivatives as Aurora kinase inhibitors

IN Adams, Jerry Leroy; Drewry, David Harold; Linn, James Andrew

GI



AB Title compds. I [R1 = HO(CH2)4-, NCCH2-, (un)substituted Ph, phenylalkyl, etc.; R2 = 2-(N,N-dimethylaminoethyl)-1,3-dioxo-2H-isoindol-5-yl, 2-(N,N-dimethylaminomethyl)-benzoxazol-6-yl, or substituted phenyl], and their pharmaceutically acceptable salts, are prepared and disclosed as Aurora kinase inhibitors. Thus, e.g., II was prepared by cyclocondensation of 5-[(2E)-3-(dimethylamino)-2-propenoyl]-N-(phenylmethyl)-2-thiophenecaboxamide (preparation given) with 1-(4-fluorophenyl)guanidine carbonate. I were tested for their Aurora kinase inhibitory activity and demonstrated pIC50 values ≥ 5.0 . I as inhibitors of Aurora kinase activity should prove useful for the treatment and prevention of diseases associated with cell proliferation such as cancer.

SO PCT Int. Appl., 205pp.

CODEN: PIXXD2

PY 2007

L9 ANSWER 2 OF 172 CAPLUS COPYRIGHT 2007 ACS on STN

TI 2-Amino-5-aminomethylphenol derivatives for dyeing hair fibers

IN Pasquier, Cecile; Tinguely, Eric; Buclin, Veronique; Braun, Hans-Juergen

AB The object of the present patent application are new 2-amino-5-aminomethylphenol derivs. and colorants for oxidative dyeing of keratin fibers, particularly human hair, containing at least 1 2-amino-5-aminomethylphenol derivative or a water-soluble salt thereof. A

2-amino-5-aminomethylphenol

derivative was prepared and used 0.00125 mol along with a developer in a hair dye formulation.

SO Eur. Pat. Appl., 28pp.

CODEN: EPXXDW

PY 2007

2007

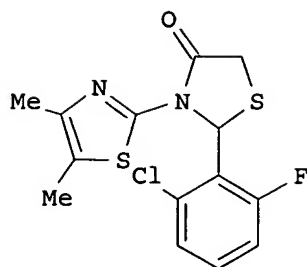
2007

L9 ANSWER 3 OF 172 CAPLUS COPYRIGHT 2007 ACS on STN

TI Design, synthesis, and evaluation of 2-aryl-3-heteroaryl-1,3-thiazolidin-4-ones as anti-HIV agents

AU Rawal, Ravindra K.; Tripathi, Rajkamal; Katti, S. B.; Pannecouque, Christophe; De Clercq, Erik

GI



I

AB Compds. having isothiurea or thiurea functional group have shown high anti-HIV-1 activity. Therefore, a series of 2-aryl-3-heteroaryl-1,3-thiazolidin-4-ones were designed, synthesized, and evaluated for anti-HIV-1 RT activity. The results of in vitro tests showed that the compound 9 (I) exhibited EC₅₀ at 0.26 μ M with minimal toxicity in MT-4 cells as compared to 0.35 μ M for thiazobenzimidazole (TBZ). It may be inferred from the present data that the majority of compds. in this series exhibit higher selectivity index than TBZ.

SO Bioorganic & Medicinal Chemistry (2007), 15(4), 1725-1731
CODEN: BMECEP; ISSN: 0968-0896

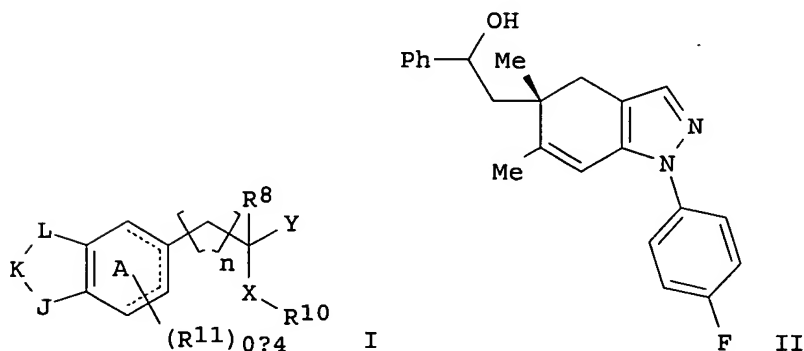
PY 2007

L9 ANSWER 4 OF 172 CAPLUS COPYRIGHT 2007 ACS on STN

TI Indazole compounds as modulators of glucocorticoid receptor, AP-1, and/or NF- κ B activity and their preparation, pharmaceutical compositions and use in the treatment of obesity, diabetes, inflammatory and immune diseases

IN Duan, Jingwu; Lu, Zhonghui; Weinstein, David S.; Jiang, Bin

GI



AB Non-steroidal compds. are provided which are useful in treating diseases associated with modulation of the glucocorticoid receptor, AP-1, and/or NF- κ B activity including obesity, diabetes, inflammatory and immune diseases, and have the structure of formula I or an enantiomer, a diastereomer, a pharmaceutically acceptable salt, or hydrate thereof.

Also provided are pharmaceutical compns. and methods of treating obesity, diabetes and inflammatory or immune associated diseases comprising said compds. Compds. of formula I wherein dotted line is a single and double bond; A is a partially saturated ring; n is 0, 1, and 2; J is (un)substituted alkyl-N, (un)substituted alkenyl-N, (un)substituted methylene, (un)substituted alkynyl-N, etc.; K and L are independently NH and derivs., and (un)substituted methylene; Y is a bond, alkylene, alkenylene, alkynylene, CO< NH and derivs., etc.; Y is H, halo, NO₂, CN, OH and derivs., NH₂ and derivs., etc.; R₈ and R₁₀ are independently H, (un)substituted alkyl, (un)substituted alkenyl, (un)substituted alkynyl, (hetero)aryl, etc.; R₁₁ is (un)substituted alkyl, (un)substituted alkenyl, (un)substituted alkynyl, halo, NO₂, azide, CN, OH and derivs., etc.; and their pharmaceutically acceptable salts thereof, are claimed. Example compound II was prepared by condensation of Et 2-methylacetoacetate with (S)-(-)- α -methylbenzylamine; the resulting enamine underwent cyclization with Me vinyl ketone to give Et 1,2-dimethyl-4-oxo-2-cyclohexenecarboxylate, which underwent formylation with Et formate to give the corresponding 6-formyl-2-cyclohexenone, which underwent cyclocondensation with 4-fluorophenylhydrazine to give 5,6-dimethyl-1-(4-fluorophenyl)-4,5-dihydroindazole-5-carboxylic acid Et ester, which underwent reduction to give the corresponding indazole-5-carboxaldehyde, which underwent olefination with (methoxymethyl)triphenylphosphonium chloride to give the corresponding enol ether, which underwent hydrolysis and resolution to give the corresponding (R)-5-indazol-5-ylacetaldehyde, which underwent addition of phenylmagnesium bromide to give followed by resolution to give both the isomers of I. All the invention compds. were evaluated for their glucocorticoid receptor, AP-1 and NF- κ B modulatory activity. These compds. may be useful in the treatment of obesity, diabetes, inflammatory and immune disease.

SO PCT Int. Appl., 171pp.

CODEN: PIXXD2

PY 2006

L9 ANSWER 5 OF 172 CAPLUS COPYRIGHT 2007 ACS on STN

TI Synthesis and Antitumor Activity of Guanylhyaazones from 6-(2,4-Dichloro-5-nitrophenyl)imidazo[2,1-b]thiazoles and 6-Pyridylimidazo[2,1-b]thiazoles

AU Andreani, Aldo; Burnelli, Silvia; Granaiola, Massimiliano; Leoni, Alberto; Locatelli, Alessandra; Morigi, Rita; Rambaldi, Mirella; Varoli, Lucilla; Farruggia, Giovanna; Stefanelli, Claudio; Masotti, Lanfranco; Kunkel, Mark W.

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Imidazothiazole guanylhyaazones, e.g., I, were prepared by substitution of bromoketones, e.g., II, with 2-aminothiazoles, e.g., III, followed by Vilsmeier formylation and condensation with aminoguanidine. The antitumor activities of the synthesized guanylhyaazones were tested.

SO Journal of Medicinal Chemistry (2006), 49(26), 7897-7901

CODEN: JMCMAR; ISSN: 0022-2623

PY 2006

L9 ANSWER 6 OF 172 CAPLUS COPYRIGHT 2007 ACS on STN

TI Assessing the Nitrogen and Carbon Nucleophilicities of 2-Aminothiazoles through Coupling with Superelectrophilic 4,6-Dinitrobenzofuroxan

AU Forlani, Luciano; Tocke, Aline Laure; Del Vecchio, Erminia; Lakhdar, Sami; Goumont, Regis; Terrier, Francois

AB The reactions of 2-aminothiazole (1a), 4-methyl-2-aminothiazole (1b), and 4,5-dimethyl-2-aminothiazole (1c) with superelectrophilic

4,6-dinitrobenzofuroxan (DNBF) have been studied in acetonitrile and a 70/30 (volume/volume) H₂O/Me₂SO mixture. While exhibiting a somewhat higher nitrogen basicity than that of anilines, 1a and 1b do not react as nitrogen nucleophiles, affording exclusively anionic C-bonded σ -adducts (C-1a and C-1b) through electrophilic SEAr substitution of the thiazole ring by DNBF. Only in the case of the 4,5-di-Me derivative 1c a N-adduct, N-1c, was obtained. On the basis of ¹H-¹⁵N correlations, it is demonstrated that this adduct, N-1c;1c,H⁺, is derived from DNBF addition at the exocyclic amino group and not at the endocyclic nitrogen center of 1c. Rate consts. have been determined in the two solvents for the formation of the adducts, revealing a reactivity sequence which accounts well for the finding that 1a and 1b behave preferentially as carbon rather than nitrogen nucleophiles. The enaminic character of these thiazoles is assessed through an estimation of the pK_a values for their C-protonation in

aqueous

solution as well as through a positioning of their reactivity on the nucleophilicity scale recently developed by Mayr et al. (Acc. Chemical Res. 2003, 36, 66). With N values of the order of 6.80 and 5.56, 1b and 1a have a carbon nucleophilicity comparable to that of N-methylindole and indole, resp.

SO Journal of Organic Chemistry (2006), 71(15), 5527-5537

CODEN: JOCEAH; ISSN: 0022-3263

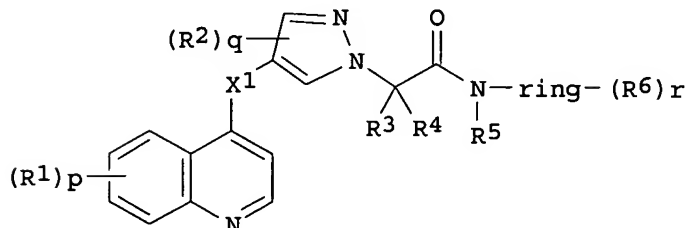
PY 2006

L9 ANSWER 7 OF 172 CAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of quinoline derivatives for use in treatment of cell proliferative disorders or disease associated with angiogenesis and/or vascular permeability

IN Jung, Frederic Henri

GI



I

AB Quinoline derivs. I, wherein X1 is O, substituted nitrogen; p is 0-3; R1 is halogen, CF₃, Cn, OH, SH, NH₂, alkyl, alkenyl, alkynyl, alkoxy, alkenyl-oxy, alkynyl-oxy, alkylthio, alkyl-sulfinyl, alkyl-sulfonyl, alkylamino, Q1X2; X2 is O, S, SO, SO₂, substituted amine, CO, amide, amino-carbonyl; Q1 is aryl, arylalkyl, cycloalkyl, cyclo-alkenyl, cyclo-alkenyl-alkyl, heteroaryl, heterocycle, heterocyclyl-alkyl; q = 0-2; R2 is halogen CF₃, CN, OH, amino, alkyl, alkenyl, alkynyl, alkoxy, alkylamino; R3 is H, alkyl, alkenyl, alkynyl; R3 and R4 together with the carbon atom to which they are attached form a cycloalkyl group; R5 is H, alkyl, alkenyl, alkynyl; ring is 6-membered mono-cyclic, 10-membered bicyclic aryl ring, heterocycle; X1 is O, S, SO, SO₂, substituted nitrogen, Co, amide, amino-carbonyl, sulfonyl-amine, amino-sulfonyl, ; R6 is halogen, CF₃, CN, OH, SH, amino, carboxy, carbamoyl, sulfamoyl, ureido, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkyl-sulfinyl, alkyl-sulfonyl, alkylamino, alkoxycarbonyl, alkanoyl, alkanoyl-oxy, alkyl-carbamoyl; r is 0-3, were prepared for use in the treatment of cell proliferative disorders or in the treatment of disease states associated with angiogenesis and/or vascular permeability. Thus, N-(3-fluorophenyl)-2-[4-(6-cyano-7-methoxy-quinolin-4-yl-oxy)pyrazol-1-yl]acetamide was prepared for use in treatment of cell proliferative disorders or disease associated with angiogenesis and/or vascular permeability. The compds. of the present

invention were tested as inhibitors of PDGFR α , PDGFR β and KDR tyrosine kinase enzymes, as inhibitors in vitro of the phosphorylation of PDGFR expressed on MG63 osteosarcoma cells, as inhibitors in vitro of the proliferation of MG63 osteosarcoma cells, as inhibitors in vitro of the proliferation of human umbilical vein endothelial cells (HUVECs), and as inhibitors in vivo of the growth in nude mice of xenografts of human tumor tissue such as CaLu-6 and Colo205.

SO PCT Int. Appl., 109 pp.

CODEN: PIXXD2

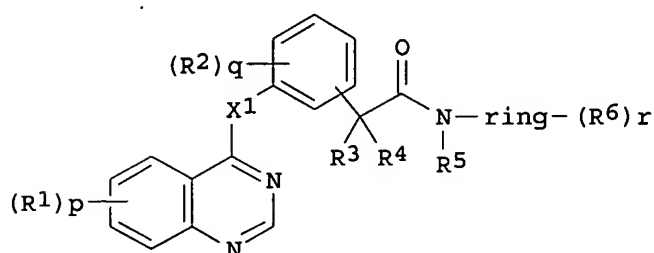
PY 2006

L9 ANSWER 8 OF 172 CAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of quinazoline derivatives for use in treatment of cell proliferative disorders or disease associated with angiogenesis and/or vascular permeability

IN Ple, Patrick; Jung, Frederic Henri

GI



I

AB Quinazoline derivs. I, wherein X1 is O, substituted amine; p is 0-3; R1 is halogen, CF₃, Cn, OH, SH, NH₂, alkyl, alkenyl, alkynyl, alkoxy, alkenyl-oxy, alkynyl-oxy, alkylthio, alkyl-sulfinyl, alkyl-sulfonyl, alkylamino, Q1X₂; X₂ is O, S, SO, SO₂, substituted amine, CO, amide, amino-carbonyl; Q1 is aryl, arylalkyl, cycloalkyl, cyclo-alkenyl, cyclo-alkenyl-alkyl, heteroaryl, heterocycle, heterocyclyl-alkyl; q = 0-2; R2 is halogen CF₃, CN, OH, amino, alkyl, alkenyl, alkynyl, alkoxy, alkylamino; R3 is H, alkyl, alkenyl, alkynyl; R3 and R4 together with the carbon atom to which they are attached form a cycloalkyl group; R5 is H, alkyl, alkenyl, alkynyl; ring is 6-membered mono-cyclic, 10-membered bicyclic aryl ring, heterocycle; r is 0-3; R6 is halogen, CF₃, CN, OH, SH, amino, carboxy, carbamoyl, sulfamoyl, ureido, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkyl-sulfinyl, alkyl-sulfonyl, alkylamino, alkoxy-carbonyl, alkanoyl, alkanoyl-oxy, alkyl-carbamoyl, were prepared for use in the treatment of cell proliferative disorders or in the treatment of disease states associated with angiogenesis and/or vascular permeability. Thus, (2S)-2-amino-2-[4-(6,7-dimethoxy-quinazolin-4-yl-oxy)phenyl]-N-(4,5-dimethyl-thiazol-2-yl)acetamide was prepared and tested in treatment of cell proliferative disorders or disease associated with angiogenesis and/or vascular permeability. The compds. of the present invention were tested as inhibitors of PDGFR α , PDGFR β and KDR tyrosine kinase enzymes, as inhibitors in vitro of the phosphorylation of PDGFR expressed on MG63 osteosarcoma cells, as inhibitors in vitro of the proliferation of MG63 osteosarcoma cells, as inhibitors in vitro of the proliferation of human umbilical vein endothelial cells (HUVECs), and as inhibitors in vivo of the growth in nude mice of xenografts of human tumor tissue such as CaLu-6 and Colo205.

SO PCT Int. Appl., 191 pp.

CODEN: PIXXD2

PY 2006

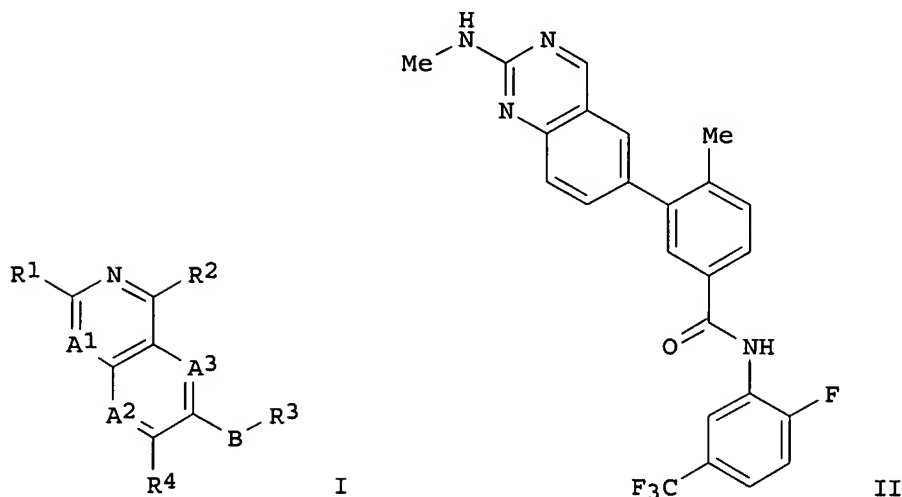
L9 ANSWER 9 OF 172 CAPLUS COPYRIGHT 2007 ACS on STN

TI Aryl nitrogen-containing bicyclic compounds and their preparation,

pharmaceutical compositions, and protein kinase inhibitory activity and use in prophylaxis and treatment of kinase-mediated diseases

IN Patel, Vinod F.; Kim, Joseph L.; Geuns-Meyer, Stephanie D.; Chaffee, Stuart C.; Cee, Victor J.; Hodous, Brian L.; Bellon, Steven; Harmange, Jean-Christophe; Olivieri, Philip R.; Thaman, Maya C.; Dimauro, Erin F.; Buchanan, John L.; McGowan, David C.; Albrecht, Brian K.; Deak, Holly L.; Bemis, Jean E.; White, Ryan; Martin, Matthew W.; Habgood, Gregory J.; Tempest, Paul A.; Masse, Craig E.; Buckner, William H.; Herberich, Bradley J.; Graceffa, Russell; Zhang, Dawei; Xu, Shimin; Sham, Kelvin; Rzasa, Robert M.; Falsey, James Richard; Chakrabarti, Partha P.; Cao, Guo-Qiang; Tomlinson, Susan Ann; Pettus, Liping H.; Smith, Adrian Leonard; Paras, Nick A.; Liu, Gang; Demorin, Frenel F.; Tasker, Andrew; Reed, Anthony

GI



AB The invention comprises a class of compds. of formula I useful for the prophylaxis and treatment of protein kinase mediated diseases, including inflammation, cancer and related conditions. Compds. of formula I wherein A¹ and one of A² and A³ are independently CR⁵ or N; B is a bond, CR⁵R⁶, CO, NR⁶, O, S, SO, or SO₂; R¹ is halo, haloalkyl, NO₂, CN, H, NH₂ and derivs., OH and derivs., SH and derivs., CHO and derivs., OC(O)R and derivs., CO₂H and derivs., CONH₂ and derivs., CSNH₂ and derivs., NHCHO and derivs., NHC(S)H and derivs., NHCONH₂ and derivs., NHCSNH₂ and derivs., SO₂H and derivs., SO₂NH₂ and derivs., etc.; R², R⁴, and R⁵ are independently H, halo, haloalkyl, NO₂, CN, OH and derivs., SH and derivs., NH₂ and derivs., CHO and derivs., CO₂H and derivs., CONH₂ and derivs., NHCONH₂ and derivs., SO₂H and derivs., SO₂NH₂ and derivs., NHSO₂H and derivs., (un)substituted C₁-10 (hetero)alkyl; (un)substituted C₂-10 alkenyl, (un)substituted C₂-10 (hetero)alkynyl, (un)substituted 3- to 10-membered (hetero)cycloalkyl, (un)substituted 4- to 10-membered (hetero)cycloalkenyl, etc.; R³ is (un)substituted (un)saturated 5- to 8-membered (hetero)monocyclic, (un)substituted (un)saturated 6- to 12-membered (hetero)bicyclic, or (un)substituted (un)saturated 7- to 14-membered (hetero)tricyclic rings; R⁶ is H, (un)substituted C₁-10 (hetero)alkyl, (un)substituted C₂-10 (hetero)alkenyl, (un)substituted C₂-10 (hetero)alkynyl, (un)substituted 3- to 10-membered (hetero)cycloalkyl, (un)substituted 4- to 10-membered (hetero)cycloalkenyl; and their stereoisomers, tautomers, solvates, pharmaceutically acceptable salts, derivs., and prodrugs thereof are claimed. Accordingly, the invention also comprises pharmaceutical compns. comprising the compds. of the invention, methods for the prophylaxis and treatment of kinase mediated

diseases using the compds. and compns. of the invention, and intermediates and processes useful for the preparation of compds. of the invention. Example compound II was prepared by boration of 3-iodo-4-methylbenzoic acid with bis(pinacolato)diboron; the resulting 4-methyl-3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)benzoic acid was converted to the corresponding acid chloride, in situ, and reacted with 2-fluoro-5-trifluoromethylbenzeneamine to give N-(2-fluoro-5-fluoromethylphenyl)-4-methyl-3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)benzamide, which underwent cross-coupling with 6-bromo-N-methylquinazolin-2-amine to give compound II. About 2000 invention compds. of formula I were prepared by similar procedures. All the invention compds. were tested for their protein kinase inhibitory activity. Example compound I along with many other invention compound showed good inhibitory activity. From the HTRF assay, the IC₅₀ values for inhibition of Tie-2 was determined to be less than or equal to 1 μ M for some of the invention compds. For the inhibition of Lck kinase enzyme, the some of the exemplary compds. exhibited an average IC₅₀ value of 25 μ M or less and some invention compound exhibited an IC₅₀ value of 1 μ M or less, in the human HTRF assay. The invention compds. were also found to be active inhibitors or the VEGF kinase receptor. Furthermore, some of the invention compds. exhibited activities in the monocyte assay with IC₅₀ values of 25 μ M or less. Various compds. of the invention have selective inhibitory activity for specific kinase receptor enzymes, including Tie-2, Lck, p38 and VEGFR/KDR. Accordingly, the compds. of the invention would be useful in therapy as antineoplasia agents, antiinflammatory agents, or to minimize deleterious effects of Tie-2, Lck, VEGF and/or p38.

SO PCT Int. Appl., 876 pp.

CODEN: PIXXD2

PY 2006.

2006

2007

L9 ANSWER 10 OF 172 CAPLUS COPYRIGHT 2007 ACS on STN

TI One pot synthesis using supported reagents system KSCN/SiO₂-RNH₃OAc/Al₂O₃: synthesis of 2-aminothiazoles and N-allylthioureas

AU Aoyama, Tadashi; Murata, Sumiko; Arai, Izumi; Araki, Natsumi; Takido, Toshio; Suzuki, Yoshitada; Kodomari, Mitsuo

AB A simple and efficient method has been developed for the synthesis of 2-aminothiazoles and N-allylthioureas from com. available materials in one pot by using a supported reagents system, KSCN/SiO₂-RNH₃OAc/Al₂O₃, in which α -halo ketones react first with KSCN/SiO₂ and the product, α -thiocyanatoketone, reacts with RNH₃OAc/Al₂O₃ to give the final products, 2-aminothiazoles, in good yield. Allyl bromides react with KSCN/SiO₂ and the products, allyl isothiocyanates, react with RNH₃OAc/Al₂O₃ to give N-allylthioureas.

SO Tetrahedron (2006), 62(14), 3201-3213

CODEN: TETRAB; ISSN: 0040-4020

PY 2006

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